

Serial No. 09/864,655
Response dated March 24, 2005
Reply to Office Action of September 28, 2004

Docket No. 4195-4002

IN THE CLAIMS

Please amend claims 236, 262, 294, 320, 352, 378, 410, 411, 412 as follows:

1-235. (Cancelled)

236. (Currently Amended) A method for facilitating event communication among networks having a plurality of systems, comprising:

receiving at least one event in a client, said event transmitted by an event-generating entity coupled thereto;

determining a priority for a received event;

obtaining at least one event handling script associated with said event; and processing said event in accordance with said event handling script.

237. (Original) The method of claim 236, wherein said event is received through an application program interface.

238. (Original) The method of claim 236, further comprising transmitting said event to a server before obtaining said event handling script.

239. (Original) The method of claim 236, further comprising storing said event prior to processing.

240. (Original) The method of claim 236, wherein said event is assigned a priority level in accordance with a pre-determined criterion.

241. (Original) The method of claim 240, wherein said processing is performed in accordance with said priority level.

242. (Original) The method of claim 236, further comprising converting said event into a well-defined event.

243. (Original) The method of claim 236, further comprising creating a workflow thread for said event.

244. (Original) The method of claim 243, wherein said workflow thread is processed in accordance with said event handling script.

245. (Original) The method of claim 243, wherein a first event and a second event are processed from separate working threads.

246. (Original) The method of claim 245, wherein the first event may be dependent on the second event to finish processing or to change a state of a property.

247. (Original) The method of claim 236, wherein said event is divided into a plurality of workflow threads that are processed simultaneously or independent of each other.

248. (Original) The method of claim 236, further comprising receiving user instructions to configure said event handling script.

249. (Original) The method of claim 248, wherein said user instructions are received from a customized component.

250. (Original) The method of claim 249, wherein said customized component handles and displays a notification.

251. (Original) The method of claim 249, wherein said customized component displays information defined by an event handling script.

252. (Original) The method of claim 236, further comprising accessing a directory service for accessing information and operational preferences for said client.

253. (Original) The method of claim 236, further comprising embedding state information into a persistent store on said client for said event.

254. (Original) The method of claim 236, further comprising providing a notification service, said notification service allowing access to a notification dispatcher for transmitting a notification.

255. (Original) The method of claim 254, wherein said notification dispatcher provides access to at least one mechanism of notification, said notification provided as a result of said processing.

256. (Original) The method of claim 255, wherein said mechanism of notification is one of electronic mail, paging, web browsing and instant messaging.

257. (Original) The method of claim 236, further comprising transmitting a notification as a result of said processing.

258. (Original) The method of claim 236, wherein said event handling script is provided as an executable script.

259. (Original) The method of claim 236, further comprising creating timers that specify the time an event is processed by an event handling script.

260. (Original) The method of claim 236, wherein the processing of said event is performed in accordance with a time sequence required by said event handling script.

261. (Original) The method of claim 236, further comprising transmitting information based on said processing of said event through an application program interface to users.

262. (Currently Amended) A method for facilitating event communication among networks having a plurality of systems, comprising:

receiving at least one event at a server, wherein said event is forwarded to said server from a client coupled thereto;

determining a priority for a received event;

obtaining at least one event handling script associated with said event; and processing said event in accordance with said event handling script.

263. (Original) The method of claim 262, further comprising dispatching a notification based upon the processing of said event.

264. (Original) The method of claim 262, further comprising accessing a repository for querying and publishing information between at least two of said plurality of systems.

265. (Original) The method of claim 264, wherein said repository provides information for one of defining, handling and processing events in said systems.

266. (Original) The method of claim 264, wherein said repository provides information to assist in discovery of information on a potential counter-party.

267. (Original) The method of claim 262, further comprising listening for determining presence of an event at the server.

268. (Original) The method of claim 262, wherein said server is a distributed server.

269. (Original) The method of claim 268, further comprising synchronizing a result of processing said event received in said distributed server.

270. (Original) The method of claim 262, further comprising loading a handling script for processing a subsection of said event.

271. (Original) The method of claim 262, further comprising saving said event received at said server in a storage device.

272. (Original) The method of claim 263, wherein said mechanism of dispatching said notification is one of electronic mail, paging, web browsing and instant messaging.

273. (Original) The method of claim 263, further comprising dispatching said notification to said client.

274. (Original) The method of claim 262, wherein said event is processed in a workflow thread.

275. (Original) The method of claim 274, wherein said workflow thread is processed in accordance with said event handling script.

276. (Original) The method of claim 274, wherein a first event and a second event are processed from separate working threads.

277. (Original) The method of claim 276, wherein said first event may be dependent on said second event to finish processing or to change a state of a property.

278. (Original) The method of claim 262, wherein said event is divided into a plurality of workflow threads that are processed simultaneously or independent of each other.

279. (Original) The method of claim 262, further comprising writing of a customized service accessible to said event handling script.

280. (Original) The method of claim 262, wherein said event handling script is configured to use system service during said processing.

281. (Original) The method of claim 262, wherein said event handling script is configured to use customized service during said processing.

282. (Original) The method of claim 280, wherein said system service provides access to a repository that facilitates querying and publishing of information.

283. (Original) The method of claim 282, wherein said information assists said systems in managing connectivity therebetween.

284. (Original) The method of claim 280, wherein said system service causes said event handling script to embed state information into a persistent storage means for allowing said event to check state across more than one processing path.

285. (Original) The method of claim 280, wherein said system service provides said event handling script with access to a schedule to determine flow of processing of said event.

286. (Original) The method of claim 280, wherein said system service further allows said event handling script to write messages to an action log of said event and to a storage device.

287. (Original) The method of claim 280, wherein said system service further allows said event handling script to create timers that specify the time an event is processed.

288. (Original) The method of claim 280, wherein said system service further allows said event handling script to create a time sequence by which said event is processed.

289. (Original) The method of claim 262, further comprising assigning a priority level to said event in accordance with a pre-determined criterion.

290. (Original) The method of claim 289, further comprising scheduling said event in accordance with said priority level.

291. (Original) The method of claim 289, wherein said processing is performed in accordance with said priority level.

292. (Original) The method of claim 262, wherein said event handling script is provided as an executable script.

293. (Original) The method of claim 262, further comprising converting said event into a well-defined event.

294. (Currently Amended) An apparatus for facilitating event communication among networks having a plurality of systems, the apparatus comprising:

a storage device;

a processor connected to said storage device;

a program stored in said storage device and configured to control said processor;

and

said processor operative with said program to:

receive at least one event, said event transmitted by an event-generating entity coupled to said apparatus;

determining a priority for a received event;

obtain at least one event handling script associated with said event; and process said event in accordance with said event handling script.

295. (Original) The apparatus of claim 294, wherein the processor is further operative with the program to receive said event through an application program interface.

296. (Original) The apparatus of claim 294, wherein the processor is further operative with the program to transmit said event to a server before obtaining said event handling script.

297. (Original) The apparatus of claim 294, wherein the processor is further operative with the program to store said event prior to processing.

298. (Original) The apparatus of claim 294, wherein the processor is further operative with the program to assign said event a priority level in accordance with a pre-determined criterion.

299. (Original) The apparatus of claim 298, wherein the processor is further operative with the program to perform said processing in accordance with said priority level.

300. (Original) The apparatus of claim 294, wherein the processor is further operative with the program to convert said event into a well-defined event.

301. (Original) The apparatus of claim 294, wherein the processor is further operative with the program to create a workflow thread for said event.

302. (Original) The apparatus of claim 301, wherein the processor is further operative with the program to process said workflow thread in accordance with said event handling script.

303. (Original) The apparatus of claim 301, wherein the processor is further operative with the program to process a first event and a second event from separate working threads.

304. (Original) The apparatus of claim 303, wherein the first event may be dependent on the second event to finish processing or to change a state of a property.

305. (Original) The apparatus of claim 294, wherein the processor is further operative with the program to divide said event into a plurality of workflow threads that are processed simultaneously or independent of each other.

306. (Original) The apparatus of claim 294, wherein the processor is further operative with the program to receive user instructions to configure said event handling script.

307. (Original) The apparatus of claim 306, wherein the processor is further operative with the program to receive said user instructions from a customized component.

308. (Original) The apparatus of claim 307, wherein said customized component handles and displays a notification.

309. (Original) The apparatus of claim 307, wherein said customized component displays information defined by an event handling script.

310. (Original) The apparatus of claim 294, wherein the processor is further operative with the program to access a directory service for accessing information and operational preferences.

311. (Original) The apparatus of claim 294, wherein the processor is further operative with the program to embed state information into a persistent store for said event.

312. (Original) The apparatus of claim 294, wherein the processor is further operative with the program to provide a notification service, said notification service allowing access to a notification dispatcher for transmitting a notification.

313. (Original) The apparatus of claim 312, wherein said notification dispatcher provides access to at least one mechanism of notification, said notification provided as a result of said processing.

314. (Original) The apparatus of claim 313, wherein said mechanism of notification is one of electronic mail, paging, web browsing and instant messaging.

315. (Original) The apparatus of claim 294, wherein the processor is further operative with the program to transmit a notification as a result of said processing.

316. (Original) The apparatus of claim 294, wherein the processor is further operative with the program to provide said event handling script as an executable script.

317. (Original) The apparatus of claim 294, wherein the processor is further operative with the program to create timers that specify the time an event is processed by an event handling script.

318. (Original) The apparatus of claim 294, wherein the processor is further operative with the program to process said event in accordance with a time sequence required by said event handling script.

319. (Original) The apparatus of claim 294, wherein the processor is further operative with the program to transmit information based on said processing of said event through an application program interface to at least one user.

320. (Currently Amended) An apparatus for facilitating event communication among networks having a plurality of systems, the apparatus comprising:

a storage device;
a processor connected to said storage device;
a program stored in said storage device and configured to control said processor;

and

said processor operative with said program to:

receive at least one event, wherein said event is forwarded to said apparatus from a client coupled thereto;
determining a priority for a received event;
obtain at least one event handling script associated with said event; and process said event in accordance with said event handling script.

321. (Original) The apparatus of claim 320, wherein the processor is further operative with the program to dispatch a notification based upon the processing of said event.

322. (Original) The apparatus of claim 320, wherein the processor is further operative with the program to access a repository for querying and publishing information between at least two of said plurality of systems.

323. (Original) The apparatus of claim 322, wherein said repository provides information for one of defining, handling and processing events in said systems.

324. (Original) The apparatus of claim 322, wherein said repository provides information to assist in discovery of information on a potential counter-party.

325. (Original) The apparatus of claim 320, wherein the processor is further operative with the program to listen for determining presence of an event at the apparatus.

326. (Original) The apparatus of claim 320, wherein said apparatus is a distributed server.

327. (Original) The apparatus of claim 326, wherein the processor is further operative with the program to synchronize a result of processing said event received in said distributed server.

328. (Original) The apparatus of claim 320, wherein the processor is further operative with the program to load a handling script for processing a subsection of said event.

329. (Original) The apparatus of claim 320, wherein the processor is further operative with the program to save said event received at said server in a storage device.

330. (Original) The apparatus of claim 321, wherein said mechanism of dispatching said notification is one of electronic mail, paging, web browsing and instant messaging.

331. (Original) The apparatus of claim 321, wherein the processor is further operative with the program to dispatch said notification to said client.

332. (Original) The apparatus of claim 320, wherein the processor is further operative with the program to process said event in a workflow thread.

333. (Original) The apparatus of claim 332, wherein the processor is further operative with the program to process said workflow thread in accordance with said event handling script.

334. (Original) The apparatus of claim 332, wherein the processor is further operative with the program to process a first event and a second event from separate working threads.

335. (Original) The apparatus of claim 334, wherein said first event may be dependent on said second event to finish processing or to change a state of a property.

336. (Original) The apparatus of claim 320, wherein the processor is further operative with the program to divide said event into a plurality of workflow threads that are processed simultaneously or independent of each other.

337. (Original) The apparatus of claim 320, wherein the processor is further operative with the program to write a customized service accessible to said event handling script.

338. (Original) The apparatus of claim 320, wherein the processor is further operative with the program to configure said event handling script to use system service during said processing.

339. (Original) The apparatus of claim 320, wherein the processor is further operative with the program to configure said event handling script to use customized service during said processing.

340. (Original) The apparatus of claim 338, wherein said system service provides access to a repository that facilitates querying and publishing of information.

341. (Original) The apparatus of claim 340, wherein said information assists said systems in managing connectivity therebetween.

342. (Original) The apparatus of claim 338, wherein said system service causes said event handling script to embed state information into a persistent storage means for allowing said event to check state across more than one processing path.

343. (Original) The apparatus of claim 338, wherein said system service provides said event handling script with access to a schedule to determine flow of processing of said event.

344. (Original) The apparatus of claim 338, wherein said system service further allows said event handling script to write messages to an action log of said event and to a storage device.

345. (Original) The apparatus of claim 338, wherein said system service further allows said event handling script to create timers that specify the time an event is processed.

346. (Original) The apparatus of claim 338, wherein said system service further allows said event handling script to create a time sequence by which said event is processed.

347. (Original) The apparatus of claim 320, wherein the processor is further operative with the program to assign a priority level to said event in accordance with a pre-determined criterion.

348. (Original) The apparatus of claim 347, wherein the processor is further operative with the program to schedule said event in accordance with said priority level.

349. (Original) The apparatus of claim 347, wherein the processor is further operative with the program to perform said processing in accordance with said priority level.

350. (Original) The apparatus of claim 320, wherein the processor is further operative with the program to provide said event handling script as an executable script.

351. (Original) The apparatus of claim 320, wherein the processor is further operative with the program to convert said event into a well-defined event.

352. (Currently Amended) A computer-readable medium having computer-executable instructions for facilitating event communication among networks having a plurality of systems, comprising instructions for:

receiving at least one event in a client, said event transmitted by an event-generating entity coupled thereto;

determining a priority for a received event;

obtaining at least one event handling script associated with said event; and
processing said event in accordance with said event handling script.

353. (Original) The computer-readable medium of claim 352, further comprising instructions for receiving said event through an application program interface.

354. (Original) The computer-readable medium of claim 352, further comprising instructions for transmitting said event to a server before obtaining said event handling script.

355. (Original) The computer-readable medium of claim 352, further comprising instructions for storing said event prior to processing.

356. (Original) The computer-readable medium of claim 352, further comprising instructions for assigning said event a priority level in accordance with a pre-determined criterion.

357. (Original) The computer-readable medium of claim 356, further comprising instructions for performing said processing in accordance with said priority level.

358. (Original) The computer-readable medium of claim 352, further comprising instructions for converting said event into a well-defined event.

359. (Original) The computer-readable medium of claim 352, further comprising instructions for creating a workflow thread for said event.

360. (Original) The computer-readable medium of claim 359, further comprising instructions for processing said workflow thread in accordance with said event handling script.

361. (Original) The computer-readable medium of claim 359, further comprising instructions for processing a first event and a second event from separate working threads.

362. (Original) The computer-readable medium of claim 361, wherein the first event may be dependent on the second event to finish processing or to change a state of a property.

363. (Original) The computer-readable medium of claim 352, further comprising instructions for dividing said event into a plurality of workflow threads that are processed simultaneously or independent of each other.

364. (Original) The computer-readable medium of claim 352, further comprising instructions for receiving user instructions to configure said event handling script.

365. (Original) The computer-readable medium of claim 364, further comprising instructions for receiving said user instructions from a customized component.

366. (Original) The computer-readable medium of claim 365, wherein said customized component handles and displays a notification.

367. (Original) The computer-readable medium of claim 365, wherein said customized component displays information defined by an event handling script.

368. (Original) The computer-readable medium of claim 352, further comprising instructions for accessing a directory service for accessing information and operational preferences for said client.

369. (Original) The computer-readable medium of claim 352, further comprising instructions for embedding state information into a persistent store on said client for said event.

370. (Original) The computer-readable medium of claim 352, further comprising instructions for providing a notification service, said notification service allowing access to a notification dispatcher for transmitting a notification.

371. (Original) The computer-readable medium of claim 370, wherein said notification dispatcher provides access to at least one mechanism of notification, said notification provided as a result of said processing.

372. (Original) The computer-readable medium of claim 371, wherein said mechanism of notification is one of electronic mail, paging, web browsing and instant messaging.

373. (Original) The computer-readable medium of claim 352, further comprising instructions for transmitting a notification as a result of said processing.

374. (Original) The computer-readable medium of claim 352, further comprising instructions for providing said event handling script as an executable script.

375. (Original) The computer-readable medium of claim 352, further comprising instructions for creating timers that specify the time an event is processed by an event handling script.

376. (Original) The computer-readable medium of claim 352, further comprising instructions for performing the processing of said event in accordance with a time sequence required by said event handling script.

377. (Original) The computer-readable medium of claim 352, further comprising instructions for transmitting information based on said processing of said event through an application program interface to users.

378. (Currently Amended) A computer-readable medium for facilitating event communication among networks having a plurality of systems, comprising instructions for:

receiving at least one event at a server, wherein said event is forwarded to said server from a client coupled thereto;

determining a priority for a received event;

obtaining at least one event handling script associated with said event; and processing said event in accordance with said event handling script.

379. (Original) The computer-readable medium of claim 378, further comprising instructions for dispatching a notification based upon the processing of said event.

380. (Original) The computer-readable medium of claim 378, further comprising instructions for accessing a repository for querying and publishing information between at least two of said plurality of systems.

381. (Original) The computer-readable medium of claim 380, wherein said repository provides information for one of defining, handling and processing events in said systems.

382. (Original) The computer-readable medium of claim 380, wherein said repository provides information to assist in discovery of information on a potential counter-party.

383. (Original) The computer-readable medium of claim 378, further comprising instructions for listening for determining presence of an event at the server.

384. (Original) The computer-readable medium of claim 378, wherein said server is a distributed server.

385. (Original) The computer-readable medium of claim 384, further comprising instructions for synchronizing a result of processing said event received in said distributed server.

386. (Original) The computer-readable medium of claim 378, further comprising instructions for loading a handling script for processing a subsection of said event.

387. (Original) The computer-readable medium of claim 378, further comprising instructions for saving said event received at said server in a storage device.

388. (Original) The computer-readable medium of claim 379, wherein said mechanism of dispatching said notification is one of electronic mail, paging, web browsing and instant messaging.

389. (Original) The computer-readable medium of claim 379, further comprising instructions for dispatching said notification to said client.

390. (Original) The computer-readable medium of claim 378, further comprising instructions for processing said event in a workflow thread.

391. (Original) The computer-readable medium of claim 390, further comprising instructions for processing said workflow thread in accordance with said event handling script.

392. (Original) The computer-readable medium of claim 390, further comprising instructions for processing a first event and a second event from separate working threads.

393. (Original) The computer-readable medium of claim 392, wherein said first event may be dependent on said second event to finish processing or to change a state of a property.

394. (Original) The computer-readable medium of claim 378, further comprising instructions for dividing said event into a plurality of workflow threads that are processed simultaneously or independent of each other.

395. (Original) The computer-readable medium of claim 378, further comprising instructions for writing a customized service accessible to said event handling script.

396. (Original) The computer-readable medium of claim 378, further comprising instructions for configuring said event handling script to use system service during said processing.

397. (Original) The computer-readable medium of claim 378, further comprising instructions for configuring said event handling script to use customized service during said processing.

398. (Original) The computer-readable medium of claim 396, wherein said system service provides access to a repository that facilitates querying and publishing of information.

399. (Original) The computer-readable medium of claim 398, wherein said information assists said systems in managing connectivity therebetween.

400. (Original) The computer-readable medium of claim 396, wherein said system service causes said event handling script to embed state information into a persistent storage means for allowing said event to check state across more than one processing path.

401. (Original) The computer-readable medium of claim 396, wherein said system service provides said event handling script with access to a schedule to determine flow of processing of said event.

402. (Original) The computer-readable medium of claim 396, wherein said system service further allows said event handling script to write messages to an action log of said event and to a storage device.

403. (Original) The computer-readable medium of claim 396, wherein said system service further allows said event handling script to create timers that specify the time an event is processed.

404. (Original) The computer-readable medium of claim 396, wherein said system service further allows said event handling script to create a time sequence by which said event is processed.

405. (Original) The computer-readable medium of claim 378, further comprising instructions for assigning a priority level to said event in accordance with a pre-determined criterion.

406. (Original) The computer-readable medium of claim 405, further comprising instructions for scheduling said event in accordance with said priority level.

407. (Original) The computer-readable medium of claim 405, further comprising instructions for performing said processing in accordance with said priority level.

408. (Original) The computer-readable medium of claim 378, further comprising instructions for providing said event handling script as an executable script.

409. (Original) The computer-readable medium of claim 378, further comprising instructions for converting said event into a well-defined event.

410. (Currently Amended) A computer program for facilitating event communication among networks having a plurality of systems, comprising:

first program means for receiving at least one event in a client, said event transmitted by an event-generating entity coupled to said client;

second program means for determining a priority for a received event;

second third program means for obtaining at least one event handling script associated with said event; and

third fourth program means for processing said event in accordance with said event handling script.

411. (Currently Amended) A computer program for facilitating event communication among networks having a plurality of systems, comprising:

first program means for receiving at least one event at a server, wherein said event is forwarded to said server from a client coupled thereto;

second program means for determining a priority for a received event;

second third program means for obtaining at least one event handling script associated with said event; and

third fourth program means for processing said event in accordance with said event handling script.

412. (Currently Amended) A system for facilitating event communication among networks having a plurality of systems, comprising:

a server with a work flow manager for determining a priority for a received event;

an agent resident on one of said plurality of networks, wherein said agent communicates with said server; and

a monitor coupled to said agent, wherein said monitor handles and displays notifications and enables event handling in said agent,

wherein said server further acts as a message router for forwarding events between one or more agents, said agent providing said server with connectivity information, said server further persisting events and event actions that flow through said system.

413. (Original) The system of claim 412, wherein said server further comprises:

a server event manager for continuously discovering an event entering said server;

a server workflow engine for processing said event received by said server;

a server workflow manager for controlling and overseeing said processing of said event by said workflow engine;

a server state manager for maintaining state of said event across said server; and

a notification dispatcher for transmitting information of said event through delivery means to at least one user.

414. (Original) The system of claim 413, wherein said server workflow engine further comprises:

at least one server workflow thread for allowing division of workflow into a smaller task, wherein said task can be performed independently; and
a script engine for providing scripted processing of events and actions within said server workflow engine.

415. (Original) The system of claim 413, wherein said server further comprises an application program interface for communicating with various messaging protocols.

416. (Original) The system of claim 415, wherein said application program interface further allows interaction with client systems.

417. (Original) The system of claim 413, wherein said server further comprises a security manager for ensuring that information passed to said server is reliable.

418. (Original) The system of claim 413, wherein said server further comprises a storage device for saving said event.

419. (Original) The system of claim 413, wherein said server further comprises a repository for storing information to define, handle and process said event.

420. (Original) The system of claim 412, wherein said agent comprises:

an agent event manager for detecting an event entering said agent;
an agent workflow engine for processing said event received within said agent;

an agent workflow manager for controlling and overseeing said processing of said event by said workflow engine;

an agent state manager for maintaining state of said event across said agent; and

a notification dispatcher for transmitting information of said event through delivery means to at least one user.

421. (Original) The system of claim 420, wherein said agent further comprises an event application program interface for interfacing with external engines to receive events addressed to said agent.

422. (Original) The system of claim 421, wherein said agent further comprises a connection manager for managing connections to said agent.

423. (Original) The system of claim 420, wherein said agent workflow engine further comprises:

at least one agent workflow thread for allowing division of workflow into a smaller task, wherein said task can be performed independently; and

a script engine for providing scripted processing of events and actions within said agent workflow engine.

424. (Original) The system of claim 420, wherein said agent further comprises an application program interface for communicating with various messaging protocols.

425. (Original) The system of claim 424, wherein said application program interface further allows interaction with client systems.

426. (Original) The system of claim 412, wherein said monitor displays notifications regarding said events.

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427. (Original) The system of claim 426, wherein said monitor allows modification of customized rules for event handling.

428. (Original) The system of claim 427, wherein said monitor may be viewed from a standard web browser.

429. (Original) The system of claim 428, wherein said monitor may be viewed from a customized application.